

51

Date: Tuesday, 11/27/2007 7:45:46 AM
 User: Kim Johnston

Process Sheet

Customer : CU-DAR001 Dart Helicopters Services Drawing Name : BO 105 SKIDTUBE ASSEMBLY
 Job Number : 35980
 Estimate Number : 10112
 P.O. Number : N/A Part Number : D105674011G
 This Issue : 11/27/2007 S.O. No. : N/A Drawing Number : D2966 REV A2
 Prsht Rev. : NC Project Number : N/A
 First Issue : N/A Type : LANDING GEAR Drawing Revision : A2
 Previous Run : 33517 Material : N/A
 Due Date : 12/16/2007 Qty: 1 Um: Each
 Written By :
 Checked & Approved By : 11.27
 Comment : Est Rev: A 04.07.07 New Issue KJ/JLM

Additional Product

Job Number:



Seq. # Machine Or Operation: Description :

1.0 DC DOCUMENT CONTROL



KS 07.12.06 (1)

Comment: DOCUMENT CONTROL

Photocopy bluefile & type labels per PPP d105-674-011G CHG002

7-11-29

2.0 D2962125 3.540 Outer Tube, Extrud



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

Pick:

Qty Part Number Description Batch

1 D2962-125 Extrusion

B12532

DP

7-11-29

3.0 LANDING GEAR 1 LANDING GEAR RESOURCE 1



Comment: LANDING GEAR RESOURCE 1

1-Determine square end of tube and deburr

2-Drill #30 pilot holes using DT8678. Open holes to Ø5/16" (0.313"). Deburr holes.

DP 7-11-29

4.0 BENDING BENDING MACHINE



Comment: BENDING MACHINE

Bend tube as per program BO105 on CNC Bender and Dwg D2966. Use 5/16" locator pin on buggy "A". EL 7-11-29

5.0 LANDING GEAR 1 LANDING GEAR RESOURCE 1



Comment: LANDING GEAR RESOURCE 1

1-Cut Fwd end of the tube using DT8185-1G

DP 7-11-29

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Date: Tuesday, 11/27/2007 7:45:46 AM
User: Kim Johnston

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: BO 105 SKIDTUBE ASSEMBLY

Job Number: 35980

Part Number: D105674011G

Job Number:



Seq. #:

Machine Or Operation:

Description :

2-Cut Aft end at 107.06" using DT8185D

3-Deburr ends

4-Drill Aft Cap holes using DT8678

5-Locate DT8679 with 1/8 clecos in Aft Cap holes. Ensure DT8679 is centered on Fwd end of tube and drill #40 Fwd bushing.

6-Clamp DT8679 to the tube. Drill all #30 wearplate and crossbolt holes.

7-Open Aft Cap holes using #6 drill

8-Open wearplate holes and two side holes to Ø19/64" (0.297") as per Dwg

D2966-1.

9-Deburr holes.

10-Open remaining (16) crossbolt holes to Ø0.500

6.0

D2964

Cap



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

Pick:

Qty Part Number

Description Batch

1 D2964

Cap

A/R

Aluminum Rod

314101

m106035/m105138

BE 07/11/29

7.0

LANDING GEAR 1

LANDING GEAR RESOURCE 1



Comment: LANDING GEAR RESOURCE 1

1-Weld Fwd Cap as per Dwg D2966 and QSI 004. Fill #40 Fwd cleco hole.

2-Grind Fwd Cap welds flush

DP 7-11-30

BE 07/11/29

8.0

QC9

VISUAL WELDING INSPECTION



Comment: VISUAL WELDING INSPECTION

PD 07-11-30 (1)

9.0

QC5

INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

BE 07/12/03 (1)

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

-Date: Tuesday, 11/27/2007 7:45:46 AM

User: Kim Johnston

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: BO 105 SKIDTUBE ASSEMBLY

Job Number: 35980

Part Number: D105674011G

Job Number:



Seq. #:

Machine Or Operation:

Description :

10.0

HAND FINISHING1

HAND FINISHING RESOURCE #1



Comment: HAND FINISHING RESOURCE #1

Chemical Conversion Coat as per QSI 005 4.1

DP 7-12-3

11.0

QC3

INSPECT POWDER COAT/CHEMICAL CONVERSION



Comment: INSPECT POWDER COAT/CHEMICAL CONVERSION

BE 7-12-3

12.0

LANDING GEAR 1

LANDING GEAR RESOURCE 1



Comment: LANDING GEAR RESOURCE 1

1-Open crossbolt holes to finish size as per Dwg D2966

2-Open 14 holes to Ø0.750" & 2 holes to Ø0.875", countersink crossbolt holes & remove alodine to prepare for welding as per Dwg D2966

3-Deburr holes inside & outside, blow out chips

DP 7-12-3

13.0

D2976

BO 105 Skidtube I Beam



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

Pick:

Qty Part Number Description Batch

1 D2976 Web

360B

SL 7-12-03

14.0

D2971

Cross Bolt Spacer



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

Pick:

Qty Part Number Description Batch

1 D2971 Crossbolt Spacer

B33221

BE 7-12-04

15.0

D2973

Cross Bolt Spacer



Comment: Qty.: 7.0000 Each(s)/Unit Total : 7.0000 Each(s)

Pick:

Qty Part Number Description Batch

7 D2973 Crossbolt Spacer

B14636

BE 7-12-04

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Date: Tuesday, 11/27/2007 7:45:46 AM
User: Kim Johnston

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: BO 105 SKIDTUBE ASSEMBLY

Job Number: 35980

Part Number: D105674011G

Job Number:



Seq. #:

Machine Or Operation:

Description :

16.0

LANDING GEAR 1

LANDING GEAR RESOURCE 1



Comment: LANDING GEAR RESOURCE 1

1-Bond Web in place per QSI 015. (Ensure holes line up)

Pick:

Qty Part Number Description Batch

A/R Sikaflex-291 105486

Sikaflex expiry date : 8-7-1

SL 7-12-03

2-Weld Crossbolt Spacers as per Dwg D2966 and QSI 004. For crossbolt spacer, weld one side, pass 5/8" drill; weld other side, pass 5/8" drill.

Pick:

Qty Part Number Description Batch

A/R Aluminum Rod M 106035

BE 7-12-04

3-Pass Ø0.630" drill to remove spillover for D2973 crossbolt. Pass Ø0.750" drill to remove spillover for D2971 crossbolt.

BE 7-12-04

4-Grind welds flush as per Dwg D2966

SL 7-12-05

17.0

QC9

VISUAL WELDING INSPECTION



Comment: VISUAL WELDING INSPECTION

D 07-12-06

18.0

QC5

INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

SL 7-12-06

19.0

HAND FINISHING1

HAND FINISHING RESOURCE #1



Comment: HAND FINISHING RESOURCE #1

Powder Coat Grey Sandtex (Ref: 4.3.5.6) as per QSI 005 4.3

M. 07/12/06

20.0

QC3

INSPECT POWDER COAT/CHEMICAL CONVERSION



Comment: INSPECT POWDER COAT/CHEMICAL CONVERSION

FL 07/12/06

21.0

D2965

Cap



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

Pick:

Qty Part Number

Description Batch

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Date: Tuesday, 11/27/2007 7:45:46 AM

User: Kim Johnston

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: BO 105 SKIDTUBE ASSEMBLY

Job Number: 35980

Part Number: D105674011G

Job Number:



Seq. #:

Machine Or Operation:

Description :

1 D2965

Cap

D28959

FL

22.0

D29701

Wearplate



Comment: Qty.: 1.0000 Each(s)/Unit Total: 1.0000 Each(s)

Pick:

Qty Part Number Description Batch

1 D2970-1 Wearplate

D33220

FL

23.0

D29703

Wearplate



Comment: Qty.: 1.0000 Each(s)/Unit Total: 1.0000 Each(s)

Pick:

Qty Part Number Description Batch

1 D2970-3 Wearplate

D14590

FL

24.0

D31761

Bushing



Comment: Qty.: 1.0000 Each(s)/Unit Total: 1.0000 Each(s)

Pick:

Qty Part Number Description Batch

1 D3176-1 Bushing

D33222

FL

25.0

D31763

Nut



Comment: Qty.: 1.0000 Each(s)/Unit Total: 1.0000 Each(s)

Pick:

Qty Part Number Description Batch

1 D3176-3 Nut

D33223

FL

26.0

ALS71032130

Insert



Comment: Qty.: 36.0000 Each(s)/Unit Total: 36.0000 Each(s)

Pick:

Qty Part Number Description Batch

36 ALS7-1032-130 Insert

or ALS4-1032-130

or AKS7-1032-130

or AKS4-1032-130

M105729

FL 07/12/06

①

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Date: Tuesday, 11/27/2007 7:45:46 AM

User: Kim Johnston

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: BO 105 SKIDTUBE ASSEMBLY

Job Number: 35980

Part Number: D105674011G

Job Number:



Seq. #:

Machine Or Operation:

Description :

27.0

AN960JD10L

Washer



Comment: Qty.: 28.0000 Each(s)/Unit Total : 28.0000 Each(s)

Pick:

Qty Part Number

Description Batch

28 AN960JD10L

Washer

m104374

FL

28.0

MS27039108

Screw



Comment: Qty.: 26.0000 Each(s)/Unit Total : 26.0000 Each(s)

Pick:

Qty Part Number

Description Batch

26 MS27039-1-08

Screw

m105076

FL

29.0

MS27039109

Screw



Comment: Qty.: 2.0000 Each(s)/Unit Total : 2.0000 Each(s)

Pick:

Qty Part Number

Description Batch

2 MS27039-1-09

Screw

m18057

FL

30.0

HAND FINISHING1

HAND FINISHING RESOURCE #1



Comment: HAND FINISHING RESOURCE #1

1-Inspect for foreign objects as per QSI 024

2-Install Inserts, Wearplate and Cap per Dwg D2966. Insert a drop of sikaflex at insert holes before installing wearplates. Seal Aft Cap using Sikaflex. Install bushing and nut: By looking Fwd, install nut to right hand side.

Pick:

Qty Part Number Description Batch

A/R Sikaflex-291

m105487

Sikaflex expiry date:

08-01

3-Wing Walk as per Dwg D2966 and QSI 005 4.4

Batch:

M106030

m.f.

07/12/10

FL 07/12/06 ①

FL 07/12/11 ①

1x

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Date: Tuesday, 11/27/2007 7:45:46 AM

User: Kim Johnston

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: BO 105 SKIDTUBE ASSEMBLY

Job Number: 35980

Part Number: D105674011G

Job Number:



Seq. #:

Machine Or Operation:

Description :

31.0

QC3

INSPECT POWDER COAT/CHEMICAL CONVERSION



Comment: INSPECT POWDER COAT/CHEMICAL CONVERSION

6 7/12/11 (6)

32.0

QC5

INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

6 7/12/11 (6)

33.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Pick: Packing Kit

34.0

D2972

Bushing



Comment: Qty.: 6.0000 Each(s)/Unit Total : 6.0000 Each(s)

Pick: Packing Kit

Qty Part Number

Description Batch

6 D2972

Bushing

14103

6 7/12/12 (1)

35.0

D2974

Packer



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

Pick: Packing Kit

Qty Part Number

Description Batch

1 D2974

Packer

34249

6 7/12/12 (1)

36.0

D2975

Wearplate



Comment: Qty.: 2.0000 Each(s)/Unit Total : 2.0000 Each(s)

Pick: Packing Kit

Qty Part Number

Description Batch

2 D2975

Wearplate

34234

6 7/12/12 (1)

37.0

AN451A

Bolt



Comment: Qty.: 3.0000 Each(s)/Unit Total : 3.0000 Each(s)

Pick: Packing Kit

Qty Part Number

Description Batch

3 AN4-51A Bolt

1105810

6 7/12/12 (1)

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes ☒ No ☐ DQA: D Date: 21/2/18
 QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Date: Tuesday, 11/27/2007 7:45:46 AM
User: Kim Johnston

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: BO 105 SKIDTUBE ASSEMBLY

Job Number: 35980

Part Number: D105674011G

Job Number:



Seq. #:

Machine Or Operation:

Description :

38.0

AN960JD10L

Washer



Comment: Qty.: 8.0000 Each(s)/Unit Total : 8.0000 Each(s)

Pick: Packing Kit

Qty Part Number Description Batch

8 AN960JD10L Washer

M104374

CU

39.0

MS21042L4

Nut



Comment: Qty.: 3.0000 Each(s)/Unit Total : 3.0000 Each(s)

Pick: Packing Kit

Qty Part Number Description Batch

3 MS21042L4 Nut

M105054

CU

40.0

MS27039108

Screw



Comment: Qty.: 8.0000 Each(s)/Unit Total : 8.0000 Each(s)

Pick: Packing Kit

Qty Part Number Description Batch

8 MS27039-1-08 Screw

M105076

LC 1/12/12 (1)

41.0

QC4

INSPECT 100% KITS FOR COMPLETENESS



Comment: INSPECT 100% KITS FOR COMPLETENESS

S 02/12/13 (1)

42.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Identify and pack for shipping as per PPP D105-674-011G

Location: _____

Rev A

CU

AS 02/12/13

(1)

43.0

QC21

FINAL INSPECTION/W/O RELEASE



Comment: FINAL INSPECTION/W/O RELEASE

P 02/12/13 (1)

Job Completion



2007/12/17
W

35980

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries



DESIGN RF	DRAWN BY RF	DART AEROSPACE USA, INC. BELLEVUE, WA	
CHECKED #	APPROVED #	DRAWING NO. D2966	REV. A SHEET 1 OF 2
DATE 00.03.08		TITLE BO 105 SKIDTUBE ASSEMBLY	SCALE NTS
A	00.03.08	NEW ISSUE	

RELEASED
00.05.11 #

Qty	Part Number	Description
X	D2966-041	SKIDTUBE ASSEMBLY
1	D2962-125	EXTRUSION
1	D2964	CAP
1	D2965	CAP
1	D2970-1	WEARPLATE
1	D2970-3	WEARPLATE
1	D2971	CROSS BOLT SPACER
7	D2973	CROSS BOLT SPACER
1	D2976	WEB
36	ALS7-1032-130 or ALS4-1032-130 or AKS7-1032-130 or AKS4-1032-130	INSERT
28	AN960JD10L	WASHER
26	MS27039-1-08	SCREW
2	MS27039-1-09	SCREW
1	D3176-1	BUSHING
1	D3176-3	NUT

A2

GENERAL NOTES:

- 1) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 2) WELDING TO BE DONE PER DART QSI 004.
- 3) INSERT D2976 WEB TO LOCATION SHOWN OFF AFT END OF SKIDTUBE AND BOND WEB INTO OUTER TUBE WITH NON-STRUCTURAL SIKAFLEX-241/-291 ADHESIVE PER DART QSI 015 AFTER BENDING.
- 4) USE DART DRILL TEMPLATE DT8451 TO LOCATE AND DRILL Ø0.297 HOLES FOR WEARSHOE INSERTS. INSTALL ALS7-1032-130 PER SECTION B-B (34 PLACES) AFTER FINISH. SEAL WEARPLATE SCREWS WITH SIKAFLEX-241/-291.
- 5) DO NOT INSTALL MS27039-1-08 SCREWS, AND AN960JD10L WASHERS IN THESE LOCATIONS.
- 6) INSTALL ALS7-1032-130 INSERT, MS27039-1-08 SCREW, AND AN960JD10L WASHER IN 2 PLACES THIS LOCATION BEFORE POWDER COATING.
- 7) FINISH:

ACID ETCH, ALODINE PER DART QSI 005 4.1 PRIOR TO INSERTING D2976 WEB
POWDER COAT ASSEMBLY GLOSS WHITE (REF 4.3.5.4) PER DART QSI 005 4.3
BLACK ANTI-SKID PAINT AS INDICATED TO 1.00 ABOVE CENTER LINE PER DART
QSI 005 4.4 (OPTIONAL) BLACK SANDTEX (REF 4.3.5.7)

01.01.24
IP 01.01.30



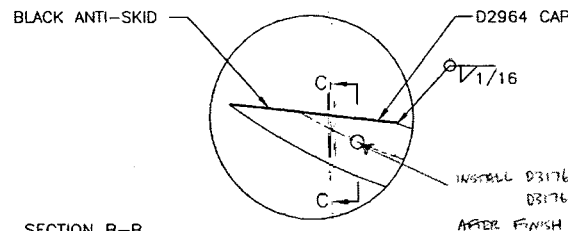
SHOP COPY
RETURN TO
ENGINEERING
CONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 35180

A2	02.10.30	ADD D3176-1/-3	# CP
A1	01.01.24	CHANGE COLOR TO BLACK SANDTEX	# CP

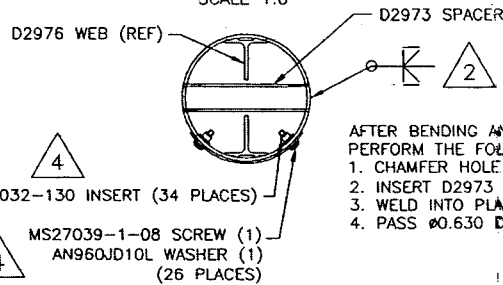
Copyright © 2000 by DART AEROSPACE USA, INC.

THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE USA, INC.

DETAIL A
SCALE 1:3

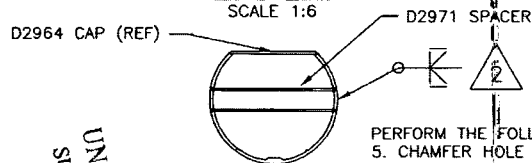


SECTION B-B
SCALE 1:6



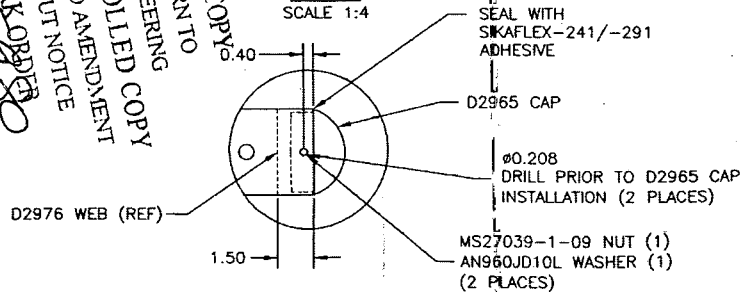
- ALS7-1032-130 INSERT (34 PLACES)
- MS27039-1-08 SCREW (1)
AN960JD10L WASHER (1)
(26 PLACES)

SECTION C-C
SCALE 1:6

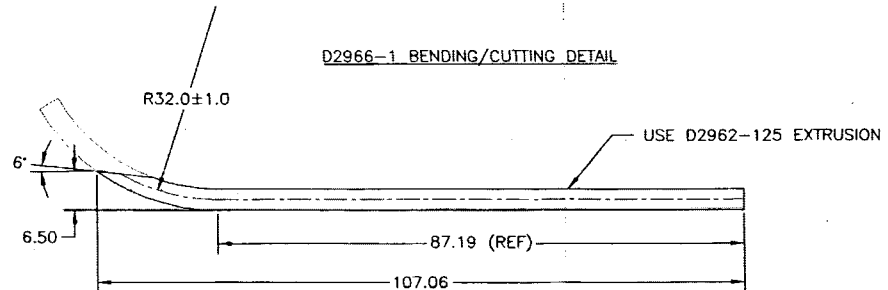


- PERFORM THE FOLLOWING FOR Ø0.625 HOLES ONLY:
5. CHAMFER HOLE 0.030 x 45°
 6. INSERT D2971 SPACER
 7. WELD INTO PLACE AND GRIND FLUSH
 8. PASS Ø0.484 DRILL TO REMOVE SPILL OVER

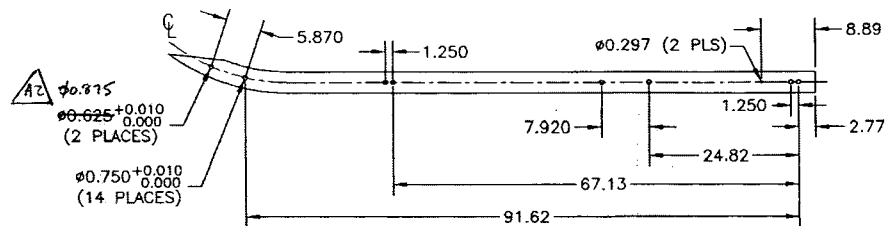
DETAIL D
SCALE 1:4



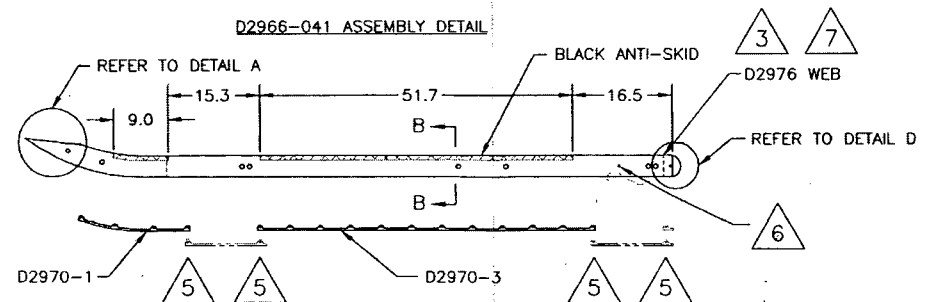
D2966-1 BENDING/CUTTING DETAIL



D2966-1 DRILLING DETAIL



D2966-041 ASSEMBLY DETAIL



COPYRIGHT © 2000 BY DART AEROSPACE USA, INC.

THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE USA, INC.

DESIGN RF	DRAWN BY RF	DART DART AEROSPACE USA, INC. BELLINGHAM, WA	REV. A
CHECKED A	APPROVED A	DRAWING NO. D2966	SHEET 2 OF 2
DATE 00.03.08	TITLE BO 105 SKIDTUBE ASSEMBLY	SCALE 1:20	

RELEASED
00-05-11

NO. 35980
WORK ORDER
UNCONTROLLED COPY
ENGINEERING
RETURN TO
SHOP COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE

NO. 135

AWS D17.1.2001
QUALIFICATION TEST RECORD

Name Barclay E.
Joint Welding Procedure tig
Part number and Job number D105 674 011G / B 35980

TEST WELDS REQUIRED

BASE METAL Aluminum
Penetration Complete ☐ Partial ☒
Current AC ☒ DC ☐

WELDING PROCESS tig
Single Weld ☒ Double Weld ☐
Backing YES ☐ NO ☒

	Position	Vertical	Down <input type="checkbox"/>	Up <input type="checkbox"/>
Sheet Groove	1G <input type="checkbox"/>	2G <input type="checkbox"/>	3G <input type="checkbox"/>	4G <input type="checkbox"/>
Tube Groove	1G <input type="checkbox"/>	2G <input type="checkbox"/>	5G <input type="checkbox"/>	6G <input type="checkbox"/>
Sheet Fillet	1F <input type="checkbox"/>	2F <input type="checkbox"/>	3F <input type="checkbox"/>	4F <input type="checkbox"/>
Tube Fillet	1F <input type="checkbox"/>	2F <input type="checkbox"/>	4F <input type="checkbox"/>	5F <input type="checkbox"/>

Crossbolt Spacer Welded into Skid tube

TEST RESULTS

Visual Pass ☒ Fail ☐
Penetration Pass ☒ Fail ☐
Crossbolt Spacer Pass ☒ Fail ☐

The above named individual is qualified in accordance with AWS D17.1.2001 to weld

Date of Test Coupon 07-12-06

Qualifier Pat Duvel

Date: Friday, 18/01/2008 7:39:39 AM
User: Linda Lacelle

Process Sheet

Customer : CC-DAR01 Dart Aerospace Ltd.	Drawing Name : D105-674 - INSERTS
Job Number : 36873	
Estimate Number : 10804	
P.O. Number :	Part Number : D105674011
This Issue : 18/01/2008 S.O. No. :	Drawing Number : NCR 08-010
Prsht Rev. : NC	Project Number :
First Issue : / / Type : LANDING GEAR	Drawing Revision :
Previous Run : 00015	Material :
Written By :	Due Date : 25/01/2008 Qty: 2 Um: Each
Checked & Approved By :	
Comment :	

Additional Product

Job Number:



Seq. #: **Machine Or Operation:** **Description :**

1.0 QC QUALITY CONTROL



Comment: QUALITY CONTROL

PULL FROM STOCK:

D105-674-011 B33517

B33517 / B35980

08/01/17, 42
B33517 / B35980

2.0 HAND FINISHING1 HAND FINISHING RESOURCE #1



Comment: HAND FINISHING RESOURCE #1

INSTALL
2 X ALS7-1032-130 PER QSI 017
IN EACH TUBE PER DRWG

41 08-01-18 (12)

3.0 ALS71032130 Insert



Comment: Qty.: 2.0000 Each(s)/Unit Total : 4.0000 Each(s)
Insert

41 08-01-18 (12)

4.0 QC5 INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

41 08/01/18 (12)

Process Sheet

Customer: CC-DAR01 Dart Aerospace Ltd.

Drawing Name: D105-674 - INSERTS

Job Number: 36873

Part Number: D105674011

Job Number:



Seq. #:

Machine Or Operation:

Description :

5.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1
REPACKAGE PER PPP
USING ORIGINAL B/N

Rw A

AS 08/01/18

(13)

6.0

QC21

FINAL INSPECTION/W/O RELEASE



Comment: FINAL INSPECTION/W/O RELEASE
***ADD A COPY OF THIS W/O
TO BOTH OF THE ABOVE W/O'S***

Job Completion



Non-Conformance Report				NCR 08-010	
Raised by: <u>Dan Stow</u>		Source: <u>Transport Canada</u>		Sheet No. <u>1</u> of <u>1</u>	
Non-Conforming Dept./Supplier: <u>Finishing</u>				Date: <u>08-01-17</u>	
Product/Service: <u>Skidtube D105-674-011</u>				Priority: <u>HIGH</u> <u>LOW</u>	
Area of Standard: QSI QSP QSPM Documents: P/O Invoice W/O Batch No. <u>B2772202 B35516</u> TSR Drawing		Section A Description of Non-Conformance Customer is missing inserts on skidtube. <u>D10 AKS ALS7-1032-130. (qty 2) on one skidtube.</u> <u>RC. Humman error and MISSED by QC</u>			
Forward to Director, Quality Assurance on completion of this box					
DQA: Section B: Indicate who is responsible for creating C/A, and a completion date. Section C: Indicate who will verify completion of C/A.					
Section B Corrective Action		Responsible for Investigation/CA: <u>L Lucelle</u> To be done by: <u>08-01-18</u>			
No	Initial	Action Description	Responsible	Due date	Sign/Date
1.0		Send customer qty 4. ALS7-1032-130	SW	08-01-17	
2.0	ED	Quarantine all B105 skids B33517 / B35980 / B35981	SM/ED	08/01/31	08/01/17
3.0	ED	check that inserts are installed as per Dwg in location A. Both inspected by ED. - two skids missing B35980/B33517	SM/ED	08/01/31	08/01/17
4.0	ED	creat custom w/o to install inserts in location A in B# 33517 / B35980	HL	08/01/18	
5.0	ED	Retrain employees to know to install inserts in Area in question and to Rep Dwg's.	ED/SM	08/01/31	08/01/18
Preventive Action Required: NO YES # _____			Fault Category: _____		
Section C Verification of C/A		Responsible for Verification of CA: _____			
No	Verification Method	Sign	Date	Forward to DQA on Completion of Verification DQA: _____ Date: _____	
QA Purposes only		N/C Closed _____		Date _____	